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WPI Acc No: 1991-010254/ 199102
XRAM Acc No: C91-004542
  Polyvinyl alcohol film with improved solubility - for prodn.
  of sachets for detergents
Patent Assignee: NLN SA (NLNN-N)
Inventor: LE NIGEN N C
Number of Countries: 013 Number of Patents: 002
Patent Family:
                     Date
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Patent No
              Kind
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EP 407301
              Α
                   19910109 EP 90401945
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FR 2649403
              Α
                   19910111 FR 899059
                                             Α
                                                 19890705
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Cited Patents: EP 284334; EP 291198; EP 79712
Patent Details:
Patent No Kind Lan Pg
                       Main IPC
                                     Filing Notes
EP 407301
             Α
   Designated States (Regional): AT BE CH DE ES FR GB GR IT LI LU NL SE
Abstract (Basic): EP 407301 A
        A water-sol. polyvinyl alcohol film having improved
    water-solubility partic. in presence of borate or perborate ions,
    comprises a PVA polymer (I) contg. 80-92 mole % PVA or a PVA/acrylic
    acid copolymer (II) contg. 30-95 mole % PVA. The novelty is that the
    film contains 1-20 wt. % sulphonated hydrotopic agent.
         (I) is obtd. by partial hydrolysis of PVAC and comprises units of
    formula (III) and (IV), where x/(x+y) is 80-92 mole %; the polymer
    being opt. partially crosslinked. (II) comprises units of formula (V)
    and (VI), where X is H, Na, K, NH4 or 1-6C alkanolamine and m/(m+n) is
    30-95 mole % and the copolymer is opt. partially crosslinked. The
    sulphonated hydrotopic agent contains a benzene ring opt. substd. by
    1-4C alkyl gp(s). and it is pref. Na, K, or NH4 toluene-, cumene- or
    xylene-sulphonate.
         USE - The film is used for preparing sachets-doses of detergents
    for laundry, partic. for washing machines. (8pp Dwg.No.0/0)
Title Terms: POLYVINYL; ALCOHOL; FILM; IMPROVE; SOLUBLE; PRODUCE; SACHET;
  DETERGENT
Derwent Class: A14; A92; A94; D25; Q34
International Patent Class (Additional): B65D-065/46; C08J-005/18;
  C08K-005/42; C08L-029/04; C11D-017/04; D06F-039/02
File Segment: CPI; EngPI
Manual Codes (CPI/A-N): A08-S08; A10-E09B; A12-P06C; A12-S06; D11-D
Plasdoc Codes (KS): 0037 0206 0042 0045 0226 0231 2007 2020 2179 2198 2280
  2318 2336 2427 2441 2509 2513 2575 2578 2776 2790 0787 3002 0044 0047
  0411 0789 2001 2008 2022
Polymer Fragment Codes (PF):
  *001* 014 02& 04- 06- 066 067 075 09- 10& 15- 231 244 245 289
        316 318 342 359 373 381 392 398 431 435 473 532 537 546 57- 575 583
        687 688 724
  *002* 014 02& 034 04- 06- 066 067 074 075 076 09- 10& 15- 230
        231 24- 244 245 250 27& 289 316 318 334 342 359 373 381 392
        398 431 435 473 50& 532 537 546 57- 575 583 687 722 724
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